

**§ 180.142 2,4-D; tolerances for residues.
(As of 12/13/99)**

(a) *General.* (1) Tolerances are established for residues of the herbicide, plant regulator, and fungicide 2,4-D (2,4-dichlorophenoxyacetic acid) in or on raw agricultural commodities as follows:

Commodity	Parts per million
Apples	5
Apricots	5
Citrus fruits	5
Pears	5
Potatoes	0.2
Quinces	5

(i) The tolerance on apricots also includes residues of 2,4-D (2,4-dichlorophenoxyacetic acid) from the preharvest application of 2,4-D dimethylamine salt to apricots.

(ii) The tolerance on citrus fruits also includes residues 2,4-D from the preharvest application of 2,4-D isopropyl ester and 2,4-D butoxyethyl ester and from the postharvest application of 2,4-D alkanolamine salts and 2,4-D isopropyl ester to citrus fruits.

(2) Tolerances are established for residues of 2,4-D at:

Commodity	Parts per million
Barley, grain	0.5
Barley, forage	20
Blueberries	0.1
Corn, fodder	20
Corn, forage	20
Corn, fresh, sweet (K+CWHR)	0.5
Corn, grain	0.5
Cranberries	0.5
Grapes	0.5
Grass hay	300
Grasses, pasture	1,000
Grasses, rangeland	1,000
Millet, forage	20
Millet, grain	0.5
Millet, straw	20
Nuts	0.2
Oats, forage	20
Oats, grain	0.5
Pistachios	0.2
Rice	0.1
Rice, straw	20
Rye, forage	20
Rye, grain	0.5
Sorghum, fodder	20
Sorghum, forage	20
Sorghum, grain	0.5
Stone Fruits	0.2
Sugarcane	2
Sugarcane, forage	20
Wheat, forage	20
Wheat, grain	0.5

(i) *Salts.* Residues on all the above may result from application of 2,4-D in acid form, or in the form of one or more of the following salts:

(A) The inorganic salts: Ammonium, lithium, potassium, and sodium.

(B) The amine salts: Alkanolamines of the ethanol and isopropanol series, alkyl (C-12), alkylk (C-13), alkyl (C-14), alkylamines derived from tall oil, amylamine, diethanolamine, diethylamine, diisopropanolamine, dimethylamine, N,N-dimethyl-linoleylamine, N,N-dimethyloleyamine, ethanolamine, ethylamine, heptylamine, isopropanolamine, isopropylamine, linoleylamine, methylamine, morpholine, octylamine, oleylamine, N-oleyl-1,3-propylenediamine, propylamine, triethanolamine, triethylamine, triisopropanolamine, and trimethylamine.

(ii) *Esters.* Residues on all the above may result from application of 2,4-D in acid form, or in the form of one or more of the following esters: amyl (pentyl), butoxyethoxypropyl, butoxyethyl, butoxypolyethylene glycol butyl ether, butoxypropyl, butyl, dipropylene glycol isobutyl ether, ethoxyethoxyethyl, ethoxyethoxypropyl, ethyl, ethoxypropyl, isobutyl, isooctyl (including, but not limited to, 2-ethylhexyl, 2-ethyl-4-methylpentyl, and 2-octyl), isopropyl, methyl, polyethylene glycol 200, polypropoxybutyl, polypropylene glycol, propylene glycol, propylene glycol butyl ether, propylene glycol isobutyl ether, tetrahydrofurfuryl, and tripropylene glycol isobutyl ether.

(3) Tolerances are established for negligible residues of 2,4-D from application of its dimethylamine salt to irrigation ditch banks in the Western United States in programs of the Bureau of Reclamation, U.S. Department of Interior; cooperating water user organizations; the Bureau of Sport Fisheries, U.S. Department of Interior; Agricultural Research Service, U.S. Department of Agriculture; and the Corps of Engineers, U.S. Department of Defense. Where tolerances are established at higher levels from other uses of 2,4-D on the following crops, the higher tolerance applies also to residues from the irrigation ditch bank use cited in this paragraph.

The established tolerances follow:

Commodity	Parts per million
Avocados	0.1 (N)
Citrus fruits	0.1 (N)
Cottonseed	0.1 (N)
Cucurbits	0.1 (N)
Forage grasses	0.1 (N)
Forage legumes	0.1 (N)
Fruiting vegetables	0.1 (N)
Grain crops	0.1 (N)
Hops	0.1 (N)
Leafy vegetables	0.1 (N)
Nuts	0.1 (N)
Pome fruits	0.1 (N)
Root crop vegetables	0.1 (N)
Seed and pod vegetables	0.1 (N)
Small fruits	0.1 (N)
Stone fruits	0.1 (N)

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(4) A tolerance is established for residues of 2,4-D sodium salt and alkanolamine salts (of the ethanol and isopropanol series), calculated as 2,4-D (2,4-dichlorophenoxyacetic acid) as follows:

Commodity	Parts per million
Asparagus	5

(5) A tolerance is established for residues of 2,4-D from application of its alkanolamine salts (of the ethanol and isopropanol series) as follows:

Commodity	Parts per million
Strawberries	0.05

(6) Tolerances are established for residues of 2,4-D from application of its dimethylamine salt for water hyacinth control in ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, rivers and streams that are quiescent or slow moving in programs conducted by the Corps of Engineers or other Federal, State, or local public agencies. Where tolerances are established at higher levels from other uses of the dimethylamine salt of 2,4-D on crops included within these commodity groups, the higher tolerances also apply to residues from the aquatic uses cited in this paragraph. The established tolerances follow:

Commodity	Parts per million
Crops in paragraph (c) of this section	1.0
Crop groupings in paragraph (c) of this section	1.0
Fish	1.0
Shellfish	1.0

(7) [Reserved]

(8) Tolerances are established for residues of 2,4-dichlorophenoxyacetic acid (2,4-d) and/or its metabolite, 2,4-dichlorophenol (2,4-DCP) in food products of animal origin as follows.

Commodity	Parts per million
Cattle, fat	0.2
Cattle, kidney	2
Cattle, meat	0.2
Cattle, mbyp (exc. kidney)	0.2
Eggs	0.05
Goats, fat	0.2
Goats, kidney	2
Goats, meat	0.2
Goats, mbyp (exc. kidney)	0.2
Hogs, fat	0.2
Hogs, kidney	2
Hogs, meat	0.2
Hogs, mbyp (exc. kidney)	0.2
Horses, fat	0.2
Horses, kidney	2
Horses, meat	0.2
Horses, mbyp (exc. kidney)	0.2
Milk	0.1
Poultry	0.05
Sheep, fat	0.2

Commodity	Parts per million
Sheep, kidney	2
Sheep, meat	0.2
Sheep, mbyp (exc. kidney)	0.2

(9) A tolerance is established for residues of 2,4-D from applications of its dimethylamine salt or its butoxyethanol ester for Eurasian Watermilfoil control in programs conducted by the Tennessee Valley Authority in dams and reservoirs of the TVA system as follows:

Commodity	Parts per million
Fish	1.0

(10) A tolerance with regional registration as defined in § 180.1(n) is established for the residues of 2,4-D (2,4-dichlorophenoxyacetic acid). The tolerance includes residues from the application of 2,4-D and its N-oleyl-1,3-propylenediamine salt on the following raw agricultural commodity:

Commodity	Parts per million
Raspberries	0.1

(11) A tolerance that expires on December 31, 2001, is established for residues of the herbicide 2,4-D (2,4-dichlorophenoxyacetic acid) resulting from the preplant use of 2,4-D ester or amine in or on the raw agricultural commodity as follows:

Commodity	Parts per million
Soybean, seed	0.02

(12) The following tolerances are established for residues of 2,4-D (2,4-dichlorophenoxyacetic acid) in the following processed feeds. Such residues may be present therein only as a result of application to the growing crop of the herbicides identified in this section:

(i) 5 parts per million in sugarcane bagasse and sugarcane molasses.

(ii) 2 parts per million in the milled fractions derived from barley, oats, rye, and wheat to be ingested as animal feed or converted into animal feed.

(13) Tolerances are established for residues of the herbicide 2,4-D (2,4-dichlorophenoxyacetic acid) as follows:

(i) 5 ppm in sugarcane molasses, resulting from application of the herbicide to sugarcane fields.

(ii) 2 ppm in the milled fractions (except flour) derived from barley, oats, rye, and wheat to be ingested as food or to be converted to food. Such residues may be present therein only as a result of application to the growing crop of the herbicides identified in 40 CFR 180.142.

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(iii) 0.1 ppm (negligible residue) in potable water. Such residues may be present therein only:

(A) As a result of the application of the dimethylamine salt of 2,4-D to irrigation ditch banks in the Western United States in programs of the Bureau of Reclamation; cooperating water user organizations; the Bureau of Sport Fisheries, U.S. Department of the Interior; Agricultural Research Service, U.S. Department of Agriculture; and the Corps of Engineers, U.S. Department of Defense.

(B) As a result of the application of the dimethylamine salt of 2,4-D for water hyacinth control in ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, rivers and streams that are quiescent or slow moving in programs of the Corps of Engineers or other Federal, State, or local public agencies.

(C) As a result of application of its dimethylamine salt or is butoxyethanol ester for Eurasian

watermilfoil control in programs conducted by the Tennessee Valley Authority in dams and reservoirs of the TVA system.

(b) *Section 18 emergency exemptions.* A time-limited tolerance is established for 2,4-dichlorophenoxyacetic acid (2,4-D) in or on wildrice in connection with use of the pesticide under a section 18 emergency exemption granted by EPA. The tolerance will expire on the dates specified in the following table.

Commodity	Parts per million	Expiration/revocation date
Wild rice	0.1 ppm	12/31/00

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]